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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,577	09/30/2003	August Joseph Borschke	11867/23	9964

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EXAMINER
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CORDRAY, DENNIS R

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/675,577	BORSCHKE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dennis Cordray	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3 docs</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Specification***

The following is an excerpt from the MPEP § 608.01(b):

(b) A brief abstract of the technical disclosure in the specification must commence on a separate sheet, preferably following the claims, under the heading "Abstract " or "Abstract of the Disclosure. " The sheet or sheets presenting the abstract may not include other parts of the application or other material. The abstract in an application filed under 35 U.S.C. 111 may not exceed 150 words in length. The purpose of the abstract is to enable the United States Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure.

The abstract of the disclosure is objected to because it is longer than 150 words.

Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 50-51, 53-63, 65-76, 69-80 and 82-91 are rejected under 35 U.S.C.

103(a) as being unpatentable over Jakob et al (5101839) in view of Liu et al (Potassium Organic Salts as Burn Additives in Cigarettes"; Beitrage zur Tabakforschung International/Contributions to Tobacco Research, 2003, Vol. 20, No. 5, pp. 341-47) and further in view of Borowski et al (4874004).

Jakob et al discloses a cigarette and smokable filler material (inner portion), which includes tobacco, glycerin as an aerosol forming material and an alginate as a binding material. The tobacco can include tobacco cut filler, tobacco laminae or processed tobacco. The smokable material can be cased or top dressed. The amount of aerosol forming material is typically at least 20% and can be up to about 70% by weight of the smokable material. Thus, the tobacco and aerosol forming material can comprise greater than 60% of the smokable material. The smokable filler material is wrapped in a paper to make the cigarette (Abs; col 2, lines 52-59; col 12, lines 16-18). Sodium citrate (an alkali metal salt of a carboxylic acid) can be included as a sequestering agent (col 11, lines 14-16). Once incorporated, the sodium citrate can also serve as a burn suppressing agent. The smokable filler material is provided by forming and drying a sheet from an aqueous slurry of all components, then cutting or shredding the sheet (col 11, lines 4-24). Forming the sheet from a slurry ensures that the ingredients of the smokable material are in intimate contact with each other. The fibrous tobacco thus also becomes a substrate for other additives, such as the aerosol forming material. Inorganic fillers, flavoring agents and other substances can be included but are not required, thus the smokable filler material can substantially comprise tobacco, aerosol forming material, binder and sodium citrate (cols 7-12). The cigarette has a cylindrical shape, a lighting end and a mouth end (end where a filter can be included) (Fig. 1). The inner portion of the cigarette (rod) and the outer wrapping have longitudinally extending outer surfaces.

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Jakob et al does not disclose the use of an alkali metal salt of a carboxylic acid as a burn suppressing agent. Jakob et al also does not disclose that a solvent soluble portion of material is removed from the tobacco. Jakob et al further does not disclose a mouth piece. Jakob et al does not disclose a wrapping paper with a porosity of greater than 15 or 20 CORESTA units.

Liu et al teaches that adding a potassium organic salt, such as a maleate, citrate or tartrate, to tobacco as a burn additive modifies the burning and reduces the undesirable mainstream smoke constituents (p 341, Summary; par bridging pp 343-344; p 346, Conclusions).

Borowski et al discloses a cigarette having a tobacco filled inner core with a wrapper and a tobacco filled outer jacket forming an annulus around the inner core. The outer jacket has a wrapper with a porosity of greater than 30 CORESTA units (Abs; col 3, lines 23-42).

The art of Jakob et al, Liu et al, Borowski et al and the instant invention are analogous as pertaining to additives to tobacco and cigarette making. The sodium citrate disclosed by Jakob et al, once incorporated into the filler material, can also serve as a burn suppressing agent. Alternatively, it would have been obvious to one of ordinary skill in the art to add a potassium organic salt, such as a maleate, citrate or tartrate, as a burn additive to the tobacco in the cigarette of Jakob et al in view of Liu et al to reduce the undesirable mainstream smoke constituents. It would also have been obvious to one having ordinary skill in the art would to remove a portion of the nicotine (solvent soluble substance) from the tobacco since such is a common practice in the

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cigarette art in order to provide the user with less of the addictive substance found in tobacco.

Jakob et al teaches a cigarette wrapping paper with very low porosity. Borowski et al teaches a cigarette wrapping paper with higher porosity, but still relatively low, thus a range of porosity overlapping the claimed range is revealed in the prior art. Paper wrapping material having a porosity greater than 15 or 20 CORESTA units is readily available on the market, as admitted by Applicant, and one having ordinary skill in the art would have used such a wrapper on the smoking article of Jakob et al without departing substantially from the disclosed paper of relatively low porosity.

Claims 52, 64, 68 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jakob et al in view of Liu et al and further in view of Borowski et al as applied to claims 50-63 and 65-91 above, and further in view of Clearman et al (5033483).

Jakob et al, Liu et al and, Borowski et al do not disclose that the the aerosol forming material is applied as a spray.

Clearman et al discloses several methods for applying an aerosol forming material to a carrier substrate, including spraying (col 14, lines 59-65). Clearman also teaches that a mouth piece keeps the heat fire cone away from the mouth and fingers of the user, and provides sufficient time for the hot aerosol to cool before reaching the user (col 18, lines 16-25).

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The art of Jakob et al, Liu et al, Borowski et al, Clearman et al and the instant invention are analogous as pertaining to additives to tobacco and cigarette making. It would have been obvious to one of ordinary skill in the art to use spraying to apply an aerosol forming substance to the smokable material of Jakob et al in view of Liu et al and further in view of Borowski et al and Clearman et al as a functionally equivalent option. Including a mouth piece would also have been obvious to protect the user from heat.

Claims 27-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jakob et al in view of Liu et al and further in view of Borowski et al and Clearman et al as applied to claims 50-91 above, and further in view of Muller et al (6257243).

Jakob et al, Liu et al, Borowski et al and Clearman et al do not disclose physically separate longitudinally extending core and outer portions, where the core portion is wrapped to separate it longitudinally from the outer portion and wherein the smokable material is in the core portion.

Muller et al discloses a smoking article comprising a coaxial rod of smokable material (longitudinally extending core portion) surrounded by a covering (wrapped), around which covering is an outer segment (longitudinally extending outer portion) of combustible material also surrounded by a wrapping material (Abs; col 2, lines 26-40). The wrapping material for the inner rod of smokable material is paper having a low to medium air permeability, with a preferred value of 0-60 CORESTA units (col 3, lines 20-22; col 4, lines 28-32). The outer wrapping is a paper of low permeability, with a

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preferred value of 0-15 CORESTA units (col 4, lines 17-32). The smokable material (inner rod) contains tobacco treated with casings, including humectants, of which glycerin is a preferred example (col 2, lines 46-48; col 6, line 3). The combination of the covering on the inner smokable rod, the outer layer and the outer covering minimize sidestream smoke and spotting (col 1, lines 34-62). The article has a mouth end (where a filter is attached) and an opposite lighting end (Fig. 1).

The art of Jakob et al, Liu et al, Borowski et al, Clearman et al, Muller et al and the instant invention are analogous as pertaining to additives to tobacco and cigarette making. It would have been obvious to one of ordinary skill in the art to use the claimed physically separate longitudinally extending core and outer portions, wherein the smokable material is in the core portion, in the cigarette of Jakob et al in view of Liu et al and further in view of Borowski et al and Clearman et al as applied to claims 50-91 above, and further in view of Muller et al to minimize sidestream smoke and spotting. Paper wrapping material having a porosity greater than 100 CORESTA units is readily available on the market and one having ordinary skill in the art would have used such a wrapper to wrap the inner smokable rod without departing substantially from the disclosed paper of low to medium air permeability. Both inner and outer portions are depicted as being exposed at the lighting end in Fig. 1 of Muller et al. Although not explicitly disclosed, it would have been obvious to make the inner and outer portions of the smoking article coextensive so that both were exposed at each end. A filter is not required in some embodiments of Muller et al.

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Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jakob et al in view of Liu et al and further in view of Borowski et al and Clearman et al as applied to claims 51-91 above, and further in view of Brackmann et al (4716913).

Jakob et al, Liu et al, Borowski et al and Clearman et al do not disclose physically separate longitudinally extending core and outer portions, where the core portion is wrapped to separate it longitudinally from the outer portion and wherein the smokable material is in the outer portion.

Brackmann et al teaches that forming cigarettes from two or more different kinds of smoking materials, one in an inner core and the other in an outer annulus is well known. Brackmann et al also teaches that it is well known that a substantial portion of the smoke entering a smoker's mouth results from burning of material in the peripheral regions of the cigarette. Brackmann et al discloses that producing a cigarette with high quality smokable material in the outer annulus and an inner core of lower quality material results in cost savings in the production (col 1, lines 9-35).

The art of Jakob et al, Liu et al, Borowski et al, Clearman et al, Brackmann et al and the instant invention are analogous as pertaining to additives to tobacco and cigarette making. It would have been obvious to one of ordinary skill in the art to use the claimed physically separate longitudinally extending core and outer portions, wherein the high quality smokable material is in the outer portion, in the cigarette of Jakob et al in view of Liu et al and further in view of Borowski et al and Clearman et al as applied to claims 27-91 above, and further in view of Brackmann et al to minimize costs of making the cigarette.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 50-91 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/674909 in view of Liu et al. Claims 50-91 claim the same subject matter as Claims 1-32 of the copending application except for the inclusion of a burn suppressing material in the instant invention. Liu et al teaches that adding a potassium organic salt, such as a maleate, citrate or tartrate, to tobacco as a burn additive modifies the burning and reduces the mainstream smoke constituents (p 341, Summary; p 346, Conclusions). It would have been obvious to one of ordinary skill in the art to modify the claims of Application No. 10/674909 in view of Liu et al to include a burn modifying agent to reduce the undesirable mainstream smoke constituents.

This is a provisional obviousness-type double patenting rejection.

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**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure [Tang et al (5090426) and Schneider et al (5379789)]. They pertain to other cigarettes comprising a coaxial rod separate from an outer annular portion.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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